PATENT

WHAT IS CLAIMED IS:

8 🗓

13 📮

base stations, each of said base stations capable of communicating with a plurality of mobile stations, a service provisioning system capable of provisioning a first one of said plurality of mobile stations comprising:

a database capable of storing a service provisioning file comprising a mobile station service provisioning program in interpreted byte-code format; and

a provisioning controller coupled to said database capable of receiving a notification indicating that said first mobile station is unprovisioned and further capable, in response to receipt of said notification, of retrieving said service provisioning file from said database and transmitting said service provisioning file to said first mobile station, wherein receipt of said service provisioning file is capable of causing said mobile station to execute said mobile station service provisioning program in said service provisioning file.

2

3

5 ..=

(ħ

1 "4

3 📮

5

- 2. The service provisioning system as set forth in Claim 1
 wherein said service provisioning file further comprises
 provisioning data used to configure said first mobile station to
 communicate with said wireless network.
 - 3. The service provisioning system as set forth in Claim 1 wherein said service provisioning file further comprises a stale code generated by said provisioning controller, said stale code indicating a time duration since said service provisioning file was transmitted to said first mobile station.
 - 4. The service provisioning system as set forth in Claim 3 wherein said first mobile station transmits said stale code back to said provisioning controller and wherein said provisioning controller prevents said first mobile station from being provisioned if said time duration exceeds a predetermined maximum threshold.

2

3

5

5. The service provisioning system as set forth in Claim 1 further comprising a security apparatus capable of determining that said first mobile station is improvisioned and, in response to said determination, generating and transmitting said notification to said provisioning controller.

10 ...

13 🗓

PATENT

6. A mobile station capable of being provisioned from a wireless network by an over-the-air (OTA) service provisioning process, said mobile station comprising:

an RF transceiver capable of receiving and demodulating forward channel messages from said wireless network and further capable of modulating and transmitting reverse channel messages to said wireless network; and

a main controller capable of receiving said demodulated forward channel messages from said RF transceiver and extracting therefrom a service provisioning file containing a mobile station service provisioning program in interpreted byte-code format, wherein said main controller, in response to receipt of said service provisioning file, is capable of interpreting and executing said mobile station service provisioning program.

7. The mobile station as set forth in Claim 6 wherein said service provisioning file further comprises provisioning data and wherein said main controller uses said provisioning data to configure said mobile station to communicate with said wireless network.

2

3

5

1

2

5 [

ľ

- 8. The mobile station as set forth in Claim 6 wherein said service provisioning file further comprises a stale code generated by a provisioning controller in said wireless network, said stale code indicating a time duration since said service provisioning file was transmitted to said mobile station.
- 9. The mobile station as set forth in Claim 8 wherein said main controller transmits said stale code back to said provisioning controller and wherein said provisioning controller prevents said mobile station from being provisioned if said time duration exceeds a predetermined maximum threshold.
- 10. The mobile station as set forth in Claim 6 wherein said mobile station service provisioning program comprises a graphical user interface (GUI) program capable of interacting with a user of said first mobile station during said OTA service provisioning process.

1

3

5

6

7

8

10 ...

11

12

13 📮

14

15 🖫

16

17

PATENT

11. For use in a wireless network comprising a plurality of base stations, each of the base stations capable of communicating with a plurality of mobile stations, a method of provisioning a first one of the plurality of mobile stations comprising the steps of:

storing in a database a service provisioning file comprising a mobile station service provisioning program in interpreted byte-code format; and

determining whether the first mobile station is provisioned;

in response to a determination that the mobile station in unprovisioned, retrieving the service provisioning file from the database;

transmitting the service provisioning file to the first mobile station, wherein receipt of the service provisioning file causes the mobile station to execute the mobile station service provisioning program in the service provisioning file.

2

3

1

2

5

Ľħ

1 "4

2 🗓

3 🗓

- 12. The method as set forth in Claim 11 wherein the service provisioning file further comprises provisioning data used to configure the first mobile station to communicate with the wireless network.
 - 13. The method as set forth in Claim 11 further comprising the steps of generating a stale code and transmitting the stale code to the first mobile station, the stale code indicating a time at which the service provisioning file was transmitted to the first mobile station.
 - 14. The method as set forth in Claim 13 further comprising the steps of receiving from the first mobile station a copy of the stale code transmitted back to the wireless network and determining a time duration since the service provisioning file was transmitted to the first mobile station.

2

5

15. The method as set forth in Claim 14 further comprising the steps of determining if the time duration exceeds a predetermined maximum threshold and preventing the first mobile station from being provisioned if the time duration exceeds the predetermined maximum threshold.

1

2

3

4

5

6

10 ...

11 [7

12 🖳

13 🗐

14 📮

1

2

1,2

PATENT

For use in a mobile station capable of communicating with a wireless network, a method of performing an over-the-air (OTA) service provisioning of the mobile station from the wireless network comprising the steps of:

receiving and demodulating forward channel messages from the wireless network;

extracting from the demodulated forward channel messages a service provisioning file containing a mobile station service provisioning program in interpreted byte-code format; and

interpreting and executing the mobile station service provisioning program, wherein the mobile station service provisioning program comprises a graphical user interface (GUI) program capable of interacting with a user of the mobile station during the OTA service provisioning process.

17. The method as set forth in Claim 16 wherein the service provisioning file further comprises provisioning data used to configure the first mobile station to communicate with the wireless network.

1

2

3 🖫

1,77

"U 1 [N

2 🗓

- 1 18. The method as set forth in Claim 17 wherein the service provisioning file further comprises a stale code generated by the 2 wireless network, the stale code indicating a time at which the service provisioning file was transmitted to the first mobile 5 station.
 - The method as set forth in Claim 18 further comprising the step of transmitting the stale code back to the wireless network.
 - The method as set forth in Claim 16 further comprising 20. the step of deleting the service provisioning file from a memory in the mobile station at an end of the service provisioning process.